

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

THE TRUSTEES OF PURDUE UNIVERSITY,

Plaintiff,

V.

CASE No. 6:21-CV-00727-ADA-DTG

STMicroelectronics International  
N.V., and STMicroelectronics, Inc.,

Defendants.

**PLAINTIFF’S RESPONSE TO DEFENDANTS’ MOTION FOR PARTIAL SUMMARY  
JUDGMENT THAT ASSERTED CLAIMS ARE NOT  
ENTITLED TO PROVISIONAL FILING DATE**

**TABLE OF CONTENTS**

I.	STATEMENT OF UNDISPUTED MATERIAL FACTS .....	1
II.	LEGAL STANDARD.....	2
III.	ARGUMENT .....	2
	A.    Purdue can prove the Saha Thesis Proposal was available when the '633 Patent was issued and thus can prove priority to the '152 Provisional.....	2
	B.    The Saha Thesis Proposal was properly incorporated into the '152 Provisional. ....	4
	C.    ST's cited authority are inapplicable. ....	5
V.	CONCLUSION.....	7

## **TABLE OF AUTHORITIES**

### **CASES:**

<i>Advanced Display Sys., Inc. v. Kent State Univ.</i> , 212 F.3d 1272 (Fed. Cir. 2000).....	4
<i>Application of Hawkins</i> , 486 F.2d 569 (C.C.P.A. 1973) .....	3
<i>Droplets, Inc. v. E*TRADE Bank</i> , 887 F.3d 1309 (Fed. Cir. 2018).....	6
<i>Feldman v. Aunstrup</i> , 517 F.2d 1351 (C.C.P.A. 1975) .....	3
<i>Finish Engineering Co., Inc. v. Zerpa Industries, Inc.</i> , 806 F.2d 1041 (Fed. Cir. 1986).....	2
<i>Hunt v. Cromartie</i> , 526 U.S. 541 (1999).....	2
<i>Husky Injection Molding Sys. Ltd. v. Athena Automation Ltd.</i> , 838 F.3d 1236 (Fed. Cir. 2016).....	4, 5
<i>Juino v. Livingston Parish Fire Dist. No. 5</i> , 717 F.3d 431 (5th Cir.2013) .....	2
<i>New Railhead Mfg., L.L.C. v. Vermeer Mfg. Co.</i> , 298 F.3d 1290 (Fed. Cir. 2002).....	2
<i>TQ Delta, LLC v. 2Wire, Inc.</i> , 2018 WL 3238776 (D. Del. 2018) .....	3
<i>Waldemar Link, GmbH &amp; Co. v. Osteonics Corp.</i> , 32 F.3d 556 (Fed. Cir. 1994).....	

### **STATUTES:**

35 U.S.C. § 111.....	
35 U.S.C. § 112.....	3
35 U.S.C. § 119.....	5, 6

**REGULATIONS:**

37 C.F.R. § 1.14.....	3
37 C.F.R. § 1.57 .....	6, 7
37 C.F.R. § 1.78.....	6

ST's Motion for Partial Summary Judgment that Asserted Claims are not Entitled to Provisional Filing Date (Dkt. 348) should be denied. Purdue can prove the Saha Thesis Proposal was available when the '633 Patent was issued. Thus, Purdue can prove priority to the '152 Provisional. ST does not claim the Saha Thesis Proposal fails to disclose the claimed invention.

#### **I. STATEMENT OF UNDISPUTED MATERIAL FACTS<sup>1</sup>**

U.S. Patent No. 7,498,633 ("'633 Patent") was filed on January 23, 2006 and issued March 3, 2009. '633 Patent (Ex. 1). The '633 Patent incorporates by reference and claims priority to U.S. Provisional Patent Application No. 60/646,152 ("'152 Provisional"), which was filed January 21, 2005. *Id.* at 4–8. Drs. Asmita Saha and James Cooper are the named inventors.

Under the heading, "Detailed Description of the Invention," the '152 Provisional states "SEE PP. 51-52 OF PATENT NOTEBOOK (ATTACHED)" and "SEE ALSO: PHD THESIS PROPOSAL OF ASMITA SAHA, SCHOOL OF ELECTRICAL AND COMPUTER ENGINEERING, JULY 17, 2004" (the "Saha Thesis Proposal"). Ex. 2 ('152 Provisional) at 5. At his deposition, Dr. Cooper testified that the inventors presented the information in the Saha Thesis Proposal in 2005 at the 11th International Conference on Silicon Carbide and Related Materials. Ex. 3 (Cooper Dep. Tr.) 175:2–179:7. Dr. Cooper confirmed they published the same information in their 2006 paper titled "Optimum Design of Short-Channel 4H-SiC Power DMSOFETs," *Materials Science Forum*, vols. 527–529, 2006, pp. 1269–1272 (attached as Ex. 4). *Id.*

On August 8, 2023, ST moved for summary judgment (Dkt. 348) that the '633 Patent is not entitled to the '152 Provisional filing date based on the Saha Thesis Proposal. But ST does not dispute that the Saha Thesis Proposal discloses a design for a silicon carbide MOSFET having

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<sup>1</sup> Purdue contests ST's material fact no. 4. Discussing the disclosures in the Saha Thesis Proposal is not an admission or concession that the four corners of the '152 Provisional do not disclose the spaced apart base contact limitations or the JFET width limitations.

segmented base contacts and a narrowed JFET region as recited in the asserted '633 Patent claims. Instead, ST contends the Saha Thesis Proposal cannot be considered part of the '152 Provisional in “determining whether the disclosure of the provisional adequately describes all the elements of the asserted claims.” Dkt. 348 at 4–7.

## II. LEGAL STANDARD

When considering a motion for summary judgment, a court must view all facts and evidence in the light most favorable to the non-moving party. *Juino v. Livingston Parish Fire Dist. No. 5*, 717 F.3d 431, 433 (5th Cir.2013); *see also Hunt v. Cromartie*, 526 U.S. 541, 553 (1999) (“In ruling on a motion for summary judgment, the nonmoving party’s evidence is to be believed, and all justifiable inferences are to be drawn in that party’s favor.”). If there are genuinely disputed issues of material fact, summary judgment cannot be utilized as the tool for deciding those issues. *Finish Engineering Co., Inc. v. Zerpa Industries, Inc.*, 806 F.2d 1041, 1043 (Fed. Cir. 1986).

## III. ARGUMENT

ST’s motion for summary judgment lacks merit and should be denied. ST does not claim the Saha Thesis Proposal fails to disclose the claimed invention, and Purdue can prove that the Saha Thesis Proposal was available when the '633 Patent was issued. Thus, Purdue can prove priority to the '152 Provisional. None of the cases ST cites supports the relief it requests.

### A. **Purdue can prove the Saha Thesis Proposal was available when the '633 Patent was issued and thus can prove priority to the '152 Provisional.**

Patent claims are entitled to a provisional application’s earlier filing date if that application contains a written description of the invention. *New Railhead Mfg., L.L.C. v. Vermeer Mfg. Co.*, 298 F.3d 1290, 1294 (Fed. Cir. 2002). A determination of whether an earlier priority application complies with the written description requirement is a question of fact. *Waldemar Link, GmbH & Co. v. Osteonics Corp.*, 32 F.3d 556, 558 (Fed. Cir. 1994). Here, ST does not dispute the

sufficiency of the disclosure in the Saha Thesis Proposal, as discussed by Purdue’s expert Dr. Stanley Shanfield. Dkt. 348 at 2 (material fact no. 5). Rather, ST contends the Saha Thesis Proposal cannot be considered part of the ’152 Provisional in “determining whether the disclosure of the provisional adequately describes all the elements of the asserted claims.” Dkt. 348 at 4–7. ST’s position is misplaced.

Contrary to ST’s assertions, nonpublic material (e.g., the Saha Thesis Proposal) that exists when an application is filed can be incorporated by reference so long as that material will be publicly available when the patent issues. *See TQ Delta, LLC v. 2Wire, Inc.*, 2018 WL 3238776 (D. Del. 2018) (holding that an industry standard approved before the application filing date, but not published until after the application filing date, was properly incorporated by reference because it was publicly available before the patent issued); *Feldman v. Aunstrup*, 517 F.2d 1351, 1355 (C.C.P.A. 1975) (To satisfy the requirements of § 112, public disclosure must be performed “upon issuance of a patent.”); *Application of Hawkins*, 486 F.2d 569, 574 (C.C.P.A. 1973) (“[T]he function of section 112 in ensuring complete public disclosure is only violated if the disclosure is not complete at the time it is made public, i.e., at the issue date.”). Thus, nonpublic material submitted in a patent application can be incorporated by reference so long as that information will become public when the patent issues.<sup>2</sup>

The information disclosed in the Saha Thesis Proposal was disseminated to the interested public in September 2005 at the 11th International Conference on Silicon Carbide and Related Materials and published in 2006—all before issuance of the ’633 Patent on March 3, 2009. *See* Ex. 3 at 175:2–179:7; Ex. 4. “A reference is considered publicly accessible if it was ‘disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the

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<sup>2</sup> By ST’s logic, provisional or patent applications would never be ineligible to be incorporated by reference since they are preserved in confidence prior to publication. *See* 37 C.F.R. § 1.14.

subject matter or art, exercising reasonable diligence, can locate it.” *Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 772 (Fed. Cir. 2018) (citing *Jazz Pharmaceuticals, Inc. v. Amneal Pharmaceuticals, LLC*, 895 F.3d 1347, 1356 (Fed. Cir. 2018)). Based on this evidence, a rational juror could find that this information was publicly accessible by the time the ’633 Patent issued and thus the provisional adequately describes the claimed invention.

**B. The Saha Thesis Proposal was properly incorporated into the ’152 Provisional.**

It is well-understood that “[i]ncorporation by reference provides a method for integrating material from various documents into a host document—a patent or printed publication in an anticipation determination—by citing such material in a manner that makes clear that the material is effectively part of the host document as if it were explicitly contained therein.” *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000). “To incorporate material by reference, the host document must *identify with detailed particularity what specific material it incorporates* and clearly indicate where that material is found in the various documents.” *Id.* (emphasis added) “[T]he standard of one reasonably skilled in the art should be used to determine whether the host document describes the material to be incorporated by reference with sufficient particularity.” *Id.*; *see also Husky Injection Molding Sys. Ltd. v. Athena Automation Ltd.*, 838 F.3d 1236, 1248 (Fed. Cir. 2016) (“The incorporation standard relies only on the reasonably skilled artisan and his or her ability to deduce from language, *however imprecise*, what a host document aims to incorporate.”) (Emphasis added).

Here, it is clear the material Purdue intended to incorporate by reference:



#### IV. Detailed Description of the Invention

Please attach a detailed description of the invention. This description can be in the form of a manuscript, publication(s) or other written documents. This description should allow one skilled in the art to practice the proposed invention.

SEE PP. 51-52 OF PATENT NOTEBOOK (ATTACHED)  
SEE ALSO: PHD THESIS PROPOSAL OF ASMITA SAHA, SCHOOL OF  
ELECTRICAL AND COMPUTER ENGINEERING, JULY 17, 2004.

Dr. Shanfield, a qualified person of skill in the art, easily understood what was incorporated:

The '152 Provisional further refers to, as the detailed description of the invention, pages 51-52 of patent notebook (attached to the '152 Provisional and dated April 26, 2004) and PhD Thesis Proposal of Asmita Saha, School of Electrical and Computer Engineering, July 17, 2004 (the "Saha Thesis Proposal")... Based on the disclosures in the '152 Provisional, I considered both the notebook pages and the Saha Thesis Proposal as part of the '152 Provisional, and I reviewed both for my analysis and opinions.

Ex. 5, ¶ 81. Dr. Shanfield's deduction is further supported by the inclusion of "see also"—a signal commonly used to cite to additional materials and authority that supports a proposition when other authority has already been cited. Purdue's manner of incorporation is sufficient. *See Husky Injection*, 838 F.3d at 1248 (finding incorporation by reference to referenced document as a whole and without the magic words "incorporated by reference").

#### C. ST's cited authority are inapplicable.

It is undisputed that the '633 Patent claims priority to the '152 Provisional. *See* Dkt. 348 at 1 (material fact no. 2); '633 Patent at 4–8 ("This patent application claims priority to and the benefit of U.S. Provisional Patent Application Ser. No. 60/646,152 entitled 'Optimized Vertical Power DMOSFETs in Silicon Carbide' which was filed on Jan. 21, 2005, the disclosure of which is expressly incorporated herein by reference"); *see also* Ex. 6 (Prosecution History) at PU00000329, [0001]; *id.* at PU00000412 (Bib Data Sheet).<sup>3</sup> Thus, ST's reliance on *Droplets, Inc.*

<sup>3</sup> Section 119(e) of Title 35 allows a later filed non-provisional application to claim priority to an

*v. E\*TRADE Bank*, 887 F.3d 1309 (Fed. Cir. 2018) is misplaced.

In *Droplets*, the patent-in-suit (’115 patent) included a priority reference to a co-pending patent, but failed to expressly claim priority to earlier pending applications, including the provisional application. *Droplets*, 887 F.3d at 1315–16. The patentee argued that by claiming priority to the ’838 patent, the ’115 patent was effectively claiming priority to the same priority date of the ’838 patent, which claimed priority to earlier applications. *Id.* However, the court held that the patentee was not entitled to the earlier priority date because the ’115 patent did not make specific reference to each of the earlier applications. *Id.* That is not the case here. The ’633 Patent indisputably claims priority to the ’152 Provisional. *See, e.g.*, Dkt. 348 (limited to “whether a ‘see also’ citation to an unpublished document in the provisional is an ‘incorporation by reference’”). The *Droplets* analysis of essential and non-essential material is also inapposite as it relates to whether a priority claim under § 120 can be incorporated by reference *not* incorporation of materials into a provisional application—the issue before the Court. *Droplets*, 887 F.3d at 1318–20.

ST’s reliance on 37 C.F.R. § 1.57 is likewise misplaced. Nothing in the statute demonstrates this section (which is self-contained) applies to provisional applications, and ST provides no supporting caselaw specifically addressing incorporation of materials into a provisional application. For example, 37 C.F.R. § 1.57(a) states in relevant part: “Subject to the conditions and requirements of this paragraph, a reference made in the English language in an

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earlier provisional application if the provisional application: (1) discloses the same invention; (2) identifies at least one common inventor; (3) the later filed non-provisional application is filed within 12 months of the filing date of the earlier filed provisional application; and (4) ***contains, or is amended to contain, a specific reference to the earlier filed provisional application.*** 35 U.S.C. § 119(e). 37 C.F.R. § 1.78(a) governs how the “specific reference” to the earlier filed provisional application must be made, i.e., in the application data sheet or ***in the first sentence of the specification.*** Here, “specific reference” to the earlier priority date of the ’152 Provisional was made in the first sentence of the specification. ’633 Patent at 4–8.

application data sheet in accordance with § 1.76 *upon the filing of an application under 35 U.S.C. 111(a)* to a previously filed application . . . . . shall constitute the specification and any drawings of the application under 35 U.S.C. 111(a) for purposes of a filing date under § 1.53 (b).” ” (Emphasis added). 35 U.S.C. 111(a) directly relates to patent applications, while 35 U.S.C. 111(b), which is *not* addressed or referenced in 37 C.F.R § 1.57, concerns provisional applications. Provisional applications are not contemplated under 37 C.F.R § 1.57. As such, ST has failed to meet its burden to show that this rule actually applies to provisional applications.

## V. CONCLUSION

Based on the foregoing, Defendants’ Motion for Partial Summary Judgment that Asserted Claims are not Entitled to Provisional Filing Date should be denied in its entirety.

Respectfully submitted,

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**COUNSEL FOR PLAINTIFF**

***THE TRUSTEES OF PURDUE  
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**CERTIFICATE OF SERVICE**

I hereby certify that on August 22, 2023, the foregoing was served via electronic mail upon all counsel of record for the parties.

/s/ Michael W. Shore